



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,030	11/18/2003	Donald A. Anderson	091-0194	7340
27431	7590	08/11/2006	EXAMINER	
SHIMOKAJI & ASSOCIATES, P.C. 8911 RESEARCH DRIVE IRVINE, CA 92618			OMGBA, ESSAMA	
			ART UNIT	PAPER NUMBER
			3726	

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,030

Applicant(s)

ANDERSON ET AL.

Examiner

Essama Omgba

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-20,26-30,32,33 and 35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-20,26-29,33 and 35 is/are allowed.
- 6) ☒ Claim(s) 1,3,5-9,30 and 32 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The indicated allowability of claims 1 and 31 is withdrawn in view of the newly discovered reference(s) to Palmer (US Patent 4,311,661). As a result the finality of the last Office action is withdrawn. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5-9, 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarville et al. (US Patent 5,968,445) in view of Palmer (US Patent 4,311,661).

With regards to claim 1, McCarville et al. discloses a method of sealing a vacuum membrane to a surface 31, the method comprising defining a vacuum zone (the surface encompassed by element 50 in figure 2), placing a breather 38 over the surface within the vacuum zone, placing a membrane over the breather (non-labeled element over element 40 in figure 2), the membrane covering the vacuum zone, covering the vacuum zone with a laminate release surface 50 (col. 5, lines 56-67 and col. 6, lines 1-49), and using a sealant tape at the boundary of the vacuum zone (col. 6, lines 59-61). Applicant should note that a vacuum seal is formed inside surface 50. Although McCarville et al. does not disclose the sealant tape being a double-stick tape, however it is known to use

Art Unit: 3726

a double-stick sealant at the boundary of a vacuum zone as attested by Palmer, see column 4, lines 1-3 and the figure. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a double-stick tape as the sealant tape of McCarville et al., in light of the teachings of Palmer, as is known in the art.

For claim 3, it is inherent that the breather will adhere to the surface.

For claims 5 and 6, see column 6, lines 46-49 and 59-61 of McCarville et al.

For claims 7-9, see column 5, lines 43-45 and figure 2 of McCarville et al.

For claim 30, McCarville et al. discloses a tool for manufacturing large aircraft parts, the tool comprising a mandrel 30 having a lay-up surface 31 and a vacuum zone defined on the lay-up surface by a low profile vacuum seal at a boundary of the vacuum zone (the surface encompassed by element 50 in figure 2), a membrane (non-labeled element over element 40 in figure 2) covering the vacuum zone, a laminate release surface 50 covering the low profile vacuum seal (col. 5, lines 31-45, col. 6, lines 45-49 and figure 2), and a sealant tape at the boundary of the vacuum zone (col. 6, lines 59-61). Applicant should note that a vacuum seal is formed inside surface 50. Although McCarville et al. does not disclose the sealant tape being a double-stick tape, however it is known to use a double-stick sealant at the boundary of a vacuum zone as attested by Palmer, see column 4, lines 1-3 and the figure. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a double-stick tape as the sealant tape of McCarville et al., in light of the teachings of Palmer, as is known in the art.

For claim 32, see column 6, lines 6-9 of McCarville.

Allowable Subject Matter

4. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 10-20, 26-29, 33 and 35 are allowed.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3726

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Essama Omgba
Primary Examiner
Art Unit 3726

eo
August 4, 2006